REMARKS

The Examiner, Mr. Dastouri, is thanked for the courtesy of the telephone interview granted applicants' attorney on June 24, 2004. During the interview, applicants' attorney discussed the terminology of "multi-level image data" with the Examiner. The Examiner encouraged applicants to use the term "grayscale image data" instead of "multi-level image data." The Examiner indicated that the term "a grayscale image data" is the well established term for describing the "multi-level image data" used in the claims of the present application. The Examiner also indicated that there would be adequate support in the file for substituting the terms.

Applicants submit that the foregoing amendments do not narrow the scope of the claims but merely substitute one well accepted term for an equivalent term used in the claims. Accordingly, the foregoing amendments are not narrowing amendments.

The basis for the Examiner's rejections appears to be that alleges that *Sekine* allegedly teaches the use of bi-level density data, and that bi-level density data is considered by the Examiner to be multi-level image data since it includes more than one density value.

Accordingly, applicants submit that *Sekine* does not teach or suggest a density level determining circuit which determines grayscale image data as set forth in the claims of the present application. Specifically, applicants submit that *Sekine* does not teach or suggest an edge judgment circuit which discriminates an edge direction of a target pixel from the density level of the target pixel and adjacent pixels thereof based on grayscale image data. Furthermore, *Sekine* also does not teach or suggest a density level determining circuit which determines grayscale density levels

in a plurality of subpixels in the target pixel, where the target pixel is divided into the subpixels, in accordance with the density level of the target pixel and of the edge direction of the target pixel discriminated by the edge judgment circuit. Specifically, the Examiner has recognized that *Sekine* discloses that the image data is bilevel data. Accordingly, in view of the amendments to the application changing the term "multi-level image data" to "grayscale image data," the Examiner is respectfully requested to reconsider and withdraw the outstanding rejections.

With regard to *Koizumi*, *Koizumi* does not teach or suggest determining grayscale density levels in a plurality of subpixels based, at least in part, upon an edge direction of a target pixel. *Koizumi* teaches that the density levels of the subpixels are determined by a formula set forth at the bottom of column 6, line 64 and by the formula set forth in column 11, line 12. Such formulas do not appear to take into account the edge direction of the target pixel which includes the subpixels.

With regard to the rejection of claims 4, 8, 9, 12-14, 17, and 20, applicants submit that the rejection of those claims, based on *Sekine*, *Koizumi* and *Silver* is also overcome by the amendment of the claims to use the term "grayscale image data." Accordingly, in view of the foregoing amendments and remarks, the Examiner is respectfully urged to reconsider and withdraw the outstanding rejections.

In the event that there are any questions concerning this Amendment, or the application in general, the Examiner is respectfully urged to telephone the undersigned attorney so that prosecution of the application may be expedited.

Respectfully submitted,

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